the course of that month; they were referred chiefly to the base of the skull and were associated with a feeling of constriction of the throat which made the patient seize his larynx at the height of the paroxysm and hold his breath until he became cyanosed. At last, feeling that it would be imprudent to delay longer, we determined to perform the ordinary temporal operation for decompression, and, encountering now no opposition, we agreed on March 13, 1911, as the time for intervention. But on March 12, re-testing once again the sense of smell we found anosmia at the right nostril. Accordingly, on the following morning a large flap was turned down in the right fronto-temporal region, and at the anterior part of the opening the dura was observed to pulsate less forcibly than elsewhere. The dura having been opened, a dark red infiltrating tumor came into view. This was removed together with surrounding brain-tissue; upon the incision, with which this was accomplished, there followed a gush of fluid and the operator's finger entered a cavity, probably the dilated ventricle.

After the operation the patient's visual power suffered a considerable decline. He was able to report at the office twelve days after the operation; his discs were still greatly choked. But in the course of a few weeks the swelling of the discs subsided, his sight improved very much, and there was no complaint about his visual acuity during the rest of his life. The sense of smell also returned. He attended to his business with great zeal, exhibiting generally much good-humor, such as was natural to him, and striving to bear philosophically the knowledge of the malignant character and the import of his disease. From time to time it was reported that his mind was not sound; there were rumors that he was displaying the exuberance of "paresis"; his wife related that he was changing mentally, but she could not convince us that there was anything more than an occasional fit of impatience or irritability very pardonable in one whose prospects were so desperate. To none of the medical men who attended him did he ever appear of unsound mind (except when he became delirious under the influence of narcotics). In July, 1911, he had a convulsive seizure, whereupon he was given bromide, to the use of which his exemption from further attacks for a whole year may be ascribed. After that period had elapsed, he suffered a series of more than seventeen convulsions in a single night, from which he emerged, however, apparently none the worse. Meanwhile a tumor had reappeared in the opening in the skull; it pulsated freely. Papillitis and headaches having recurred Dr. Stillman again removed the tumor October 1, 1912.

The papillitis disappeared, and in comfort the patient went about his affairs for several months. It was not long, however, before new nodules formed at the site of operation, despite the treatment with the X-ray, which had been sedulously applied ever since the first operation. In February, 1913, a fluctuating protuberance through the defect in the skull was punctured and 70 CC of turbid and discolored cerebrospinal fluid withdrawn. Herewith began the last stage of the disease. The fluid accumulated very rapidly, its tension became greater, the discomfort increased, the patient vomited, had headaches and flashes of blindness, and his discs began to choke again. The relief afforded by the punctures became briefer and briefer, as time went on, so that the patient demanded them more frequently, finally three a day. The photograph (Fig. 1) shows the protrusion on April 3, 1913. The tappings having become ineffectual, the patient's distress impelled us to a last palliative operation, and on May 15 a mass the size of a large lime was removed, besides smaller tumor-nodules from the flap. There was an immediate benefit from this; the swelling of the optic discs again receded, the headache and the vomiting ceased and the patient declared he felt "fine". But after 10 days of comfort all the symptoms returned. The protrusion through the opening in the skull increased to several times the size of that shown in the photograph, and necessitated frequent tappings with the escape of ever larger amounts of fluid, until a maximum of 485 CC at a single sitting was reached. In the last 30 days of his life, which ended July 14, 1913, the quantity of fluid thus obtained amounted to 5173 CC!

Figure 2 shows the situation of the growth in the brain. This illustration will serve also to indicate the position of the tumors in the other members of this group, as Figure 1 indicates their site with relation to the skull. The proximity to the median line explains the production of bilateral loss of smell by a single tumor. The neoplasm in the last case penetrated into the anterior horn and extended far into the lateral ventricle, pushing away the corpus callosum and the internal capsule without invading them.

The following items of diagnostic importance may be gathered from this group of cases:

(1). The loss of the sense of smell may be of very great use in localizing the disease in the prefrontal area. I find that some textbooks do not make this clear; they mention this disturbance rather as resulting from a lesion of the uncinate gyrus of the temporal lobe; Oppenheim, moreover, states that he has repeatedly observed the occurrence of unilateral or bilateral anosmia associated with tumors of the cerebellum, resulting from the pressure of the base of the brain upon the olfactory nerve. Had this statement been allowed to prevail in the cogitations upon the situation of the tumor in the first case, it must have misled us into seeking the growth in the posterior fossa.

(2). Three of the cases supply confirmation of the assertion that in frontal tumors it is the eye on the side of the tumor that is likely to be affected the earlier and the more severely.

(3). The X-ray picture may conduce to certainty in localization by revealing a circumscribed hyperostosis over the tumor.

(4). Circumscribed tenderness of the skull to pressure or percussion may be a valuable localizing sign.

(5). Whatever a positive Wassermann may mean, it does not necessarily mean that the patient's cerebral disease is cerebral syphilis.

THE DIFFERENTIAL DIAGNOSIS OF PALMAR SYPHILIS, ECZEMA AND PSORIASIS.*

By DOUGLASS W. MONTGOMERY, M. D., and GEORGE D. CULVER, M. D., San Francisco.

The symptoms of syphilis, eczema or psoriasis of the palms are often so perplexing that a differentiation is not always possible, and yet a positive diagnosis is here particularly important, not alone because of the necessity of the hand in daily work, but also because these diseases in this situation are so liable to be refractory that the moral support of certainty is eminently desirable as tending to hold the physician to a correct line of treatment.

Since the fire of 1906 there are records in our office of one hundred and two of these cases, of

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which sixty-four are recorded as eczema and nineteen each as psoriasis and syphilis. We now proceed to a review of some points of interest in these one hundred and two cases.

The Syphilitic Cases.

Of the syphilitic cases twelve were of men and seven were of women. Considering the very much greater frequency of syphilis in males than in females, this was a much greater number of women than one would naturally expect. We do not know whether this was fortuitous in the relatively small number of cases, or incidental to the kind of practice, or from some natural inclination to this localization of the disease in women. Fourteen gave a positive history of infection, while five had either negative or doubtful histories. Of these five, four cleared up under treatment and one came for only a single consultation. The time of infection preceding the palmar eruption of those giving positive histories ranged from eighteen months to twenty years, only four being under six years, while seven were infected over nine years before. The duration of the lesions ranged from a few days to five years; only three of the nineteen patients had their trouble less than three months, while with ten of them it had been present for over six months. With twelve of the patients the palmar lesions were unilateral, ten having the right palm involved and only two the left. This preference for the right palm was interesting. Most people are right-handed, and being so, the right hand would be more exposed to injury than the left, and syphilitic lesions are well known to follow blows and other injuries. No notes were, however, made as to whether the patients were right or left-handed. With seven patients the eruption was bilateral, and of these seven, six had other lesions on the body, four having the soles affected. One of them had had other lesions fairly recently. Six of the twelve unilateral cases were of the palm only, and six had lesions elsewhere, the soles being affected in three instances. In fact the soles were involved in seven of the nineteen cases. The Wassermann test was made in nine of the cases, and two of the nine were negative, though the two that gave negative Wassermann tests yielded rapidly to salvarsan. Salvarsan was administered in ten of the cases, and proved successful in eight, and partially successful in the remaining two. The palms of one of these two cleared up, but there was later a circinate eruption on the back of the hands, that yielded to other specific treatment. In the other one of these two all of the lesions elsewhere on the body, of which there were a number, including both soles, vanished; the lesion on the hand was greatly improved, and became of an entirely different character some time after the injection. It presented in every respect, when seen later, the typical picture of a palmar eczema. This was one of the two cases that gave a negative Wassermann. It is our opinion that the palmar lesion was a mixed one of syphilis and eczema. As far as we can learn, nine of the ten cases that were given salvarsan have remained well, while the remaining one associated, as above stated, with eczema, cleared up only as far as the syphilitic disease was concerned. This patient, when seen quite recently, still had her eczema. The ordinary history of syphilitic palmar lesions under any other specific treatment than salvarsan is that of either marked persistence or constant recurrence, and these lesions previous to the introduction of salvarsan were among the most desperately tantalizing conditions we were called upon to treat. Thirteen of the nineteen luetic patients complained of physical discomfort to a lesser or greater extent. Notes on this point were not made on the records of the other six. A number complained of a mental unrest, their thoughts revolving around the palmar lesion to a poignant degree, and attaining in some instances to suicidal mania. Two complained of severe itching; the symptoms of one of these two faded away completely under salvarsan, while the other patient was the one that presented the typical picture of eczema after the syphilitic portion of her trouble had been cleared up by salvarsan.

The Eczema Cases.

Of the sixty-four cases of eczema twenty-eight were males and thirty-six were females. Here we are confronted with a preponderance of females over males, and in a disease that forces patients to apply for treatment, this cannot be altogether attributed to the greater inclination women show to seeking medical advice. This again, as in syphilis, would look as if there were some relatively greater inclination for eczema to localize itself in the palms of women. In forty-nine patients (76.56%) there was bilateral involvement, and in fifteen, unilateral. Of the unilateral cases ten were of the right and five of the left palm. In thirty-seven the palmar eruption was associated with lesions elsewhere, the soles being affected in nine instances. Itching was more or less marked in fifty-three (82.81%) of the sixty-four cases, while tenderness or pain was present in thirty-one. There was infiltration in twenty-nine of the number, and in eight of these it was deep with deep fissuring. The eruption ranged in duration from a few days to a number of years. Recurrences were common in many. Fifty-two patients (81.25%) gave a history of having had eruptions lasting months or years. In two of the sixty-four cases the lesions may have been syphilitic, and were recorded as doubtful. In another instance the eruption resembled a circinate syphilide of the right palm. It had been present two years, and had, before the patient consulted us, resisted syphilitic treatment. The eruption disappeared entirely under X-ray exposures, and had remained well more than two years.

The Psoriasis Cases.

Though psoriasis of the palms is generally considered rare it is not unusually so. The nineteen cases we have seen since April 1906, were among two hundred and thirteen cases of psoriasis, nearly nine per cent. Of more interest is the rareness with which it involves the palms alone. In our series there were four such, or less than two per cent. Of these four, two were unilateral and two

bilateral. None complained of marked discomfort. Anticipating a question we would say that at any rate not all of these four were incorrect diagnoses. So far as we know none was positively so, though one of the four patients, a woman with a bilateral palmar lesion, which we diagnosed as psoriasis, recovered from this affliction, and returned several years later with a definite, multiple, small gummatous ulceration of the nose, which readily cleared up under specific treatment. In this case the palmer lesions were probably specific. Such an error in diagnosis can generally be avoided at the present time through the Wassermann test. One particularly interesting psoriatic patient, but not one of the four with the palms alone affected, was a man with the palms and soles involved. His eruption cleared up under treatment for psoriasis at different times during seven years. He returned more recently with circinate lesions of the palms, which looked exactly like syphilis, but there were patches of typical psoriasis scattered over other parts of the body. With all evidence of syphilis in this case negative, it is only fair to conclude that his palmar lesions were due to psoriasis.

Remarks on Syphilis of the Palm.

The late palmar syphilide is a most persistent chronic lesion. It is usually unilateral and often isolated, but in our cases was more frequently associated with other syphilitic lesions. Generally when first seen it is of a circinate form, and begins as a small spot that clears in the center as it spreads, forming a ring. The rings are generally imperfect, part of their borders healing during the spreading process, leaving but little scarring, much less than in other late luetic lesions. The outer edges are, as a rule, firmly and deeply infiltrated, making the sharply marked borders even more distinct. These borders may be covered with dirty white, closely adherent flakes of desquamation. Sometimes there is only one circinate area, but more often there are several, and in spreading these areas converge, forming a typical gyrate figure, which is very characteristic. Fissuring in the natural creases similar to that occurring in eczema is not uncommon. Tenderness is generally a marked feature, and it may be so pronounced as to render the hand almost useless.

Besides this deeply infiltrated form there is a more superficial squamous syphilide. Its substratum is a diffuse syphilitic infiltration in the papillary layer of the skin, that may be clinically imperceptible, or at least unobtrusive, and this causes patchy desquamation of the superposed epithelium. Such a patch may correspond to the entire volar surface of the palm and digits, and may exactly resemble a chronic squamous eczema.

Remarks on Eczema of the Palm.

Eczema is a disease due to a toxemia, and is accordingly by far more mobile than a syphilide, which is a localized microbic disease. The pathology of eczema, therefore, forms a marked contrast in its fundamental nature to that of cutaneous syphilis. Eczema is an exudative disease, the principal seat of activity being in the papillary layer. As the disease is toxic and exudative the fluctuations of the symptoms may be very sharp. The exudation from the blood vessels is serum that frequently accumulates in the rete mucosum as droplets or vesicles. These vesicles as seen through the thick horny layer of the palm have the translucent appearance of boiled sago grains. In the intervals between acute attacks, or when the products of epithelial desquamation heap up on the palm these vesicles may not be visible. Those cases of herpetic or neurotic eczema occurring as sudden outbursts of itchy groups of vesicles or papules, in either case often excoriated, show plainly their exudative nature, and their diagnosis is easy.

Eczema of the palms is more apt to be bilateral than a syphilide. It is more diffuse and less sharply outlined, is generally attended by more fissuring, and almost always by more itching. Although many authorities state that there is more infiltration in a syphilitic lesion, Hardaway and Grindon claim that squamous eczema of the palms usually presents the greater infiltration.[1] And undoubtedly they are right in quite a large number of cases. As before stated eight of our sixty-four cases of eczema presented deep infiltration. Walker explains clearly why palmar eczema may acquire this special character. The well developed horny layer is resistant to the exudation, preventing its ready access to the surface, and causing it to diffuse through the layers of the skin, later resulting in desquamation of thick flakes, leaving a thickened sodden base.[2] This sodden base easily fissures quite deeply in the natural folds, and the fissures become extremely painful.

Remarks on Psoriasis of the Palms.

Psoriasis is decidedly a desquamative disease as contrasted with eczema which is fundamentally exudative, and syphilis, which is microbic of the connective tissue. The old controversies over psoriasis are enlightening in this respect where the discussions hinged on whether psoriasis was primarily a desquamation that later became inflammatory, or whether the first symptom was redness due to inflammatory reaction in the blood vessels of the papillary layer. It is now settled that the first changes are those of inflammatory reaction in the papillary blood vessels, but nevertheless the chief feature of psoriasis is desquamation, as contrasted in eczema with serous exudation.

Because of the special characteristics of the horny layer of the palms, psoriasis in this situation differs from psoriasis elsewhere on the body. It may be as diffuse as eczema with less infiltration, but is frequently of a patchy distribution, and does not usually have the infiltrated edge found in sphilis of the palm. There is less itching than in eczema, and, as a rule, less discomfort than in either syphilis or eczema. It can most frequently be diagnosed by the presence of patches of psoriasis elsewhere.

1 Hardaway and Grindon, Cutaneous Therapeutics, pp. 292-3.

2 Norman Walker, M. D., Introduction to Dermatology, 3d ed., pp. 124-5.

The Wassermann Test.

The Wassermann test is an aid, though not an absolutely reliable one, in the diagnosis of syphilitic disease of the palm. We had two striking instances of rapid recovery under salvarsan in patients with negative Wassermann tests. One must also be on the alert for the opposite; a squamous disease of the palm is not necessarily syphilitic simply because a Wassermann is positive.

The following is an example of how contradictory clinical evidence in these cases may be. A man, forty-eight years of age, consulted us in regard to a squamous lesion on the right palm that had been diagnosed as a syphilide, and furthermore he had with him a report of a positive Wassermann. There was no venereal history. A consideration of the case led us to believe it to be an eczema, and the condition cleared up under treatment so directed. Over a year later he came in with a hard chancre, and in its serum many spirochaetae were found. The positive Wassermann must have been an error.

Conclusions.

From our observation we would conclude that eczema of the palm is more than three times as common as either syphilis or psoriasis. According to our experience a syphilide of the palm may be a superficial desquamating lesion, with no more evidence of infiltration than a superficial eczema. In fact excessive infiltration is more frequently met with in eczema than in syphilis. All these diseases may fissure deeply, though syphilis and eczema are more apt to do so than psoriasis. The presence of itching does not exclude syphilis of the palm, nor does a negative history or a negative Wassermann. The proportion of cases where the soles and palms are both affected is greater in sphilis than in eczema. The characteristics of persistence or recurrence may be present in any of these diseases in this situation, though syphilis is more apt to be persistent, and eczema is more apt to disappear and to recur without treatment.

Given a marked squamous lesion of the palm whether unilateral or bilateral, which resists treatment for eczema, psoriasis or syphilis, when the latter is treated with mercury and the iodides, it is fair to conclude that it may be specific, particularly if it is a circinate lesion. If other syphilitic lesions are present on the body it will be easier to draw a conclusion, and a positive Wassermann will help. After making the diagnosis of syphilis, salvarsan or neo-salvarsan is without question the best treatment.

It must be conceded that the best diagnostician can mistake psoriasis of the palms for syphilis; and the same is true of eczema.

PARASITIC SKIN DISEASE IN CALIFORNIA.*

By ERNEST DWIGHT CHIPMAN, M. D., San Francisco.

The subject of this paper was chosen because: 1, parasitic skin diseases are definitely increasing in California; 2, many new forms are being recognized elsewhere which probably occur here; 3, the diagnosis of certain of the mycotic diseases is a matter of paramount importance not only in dermatology but in the entire field of medicine.

The increase referred to applies both to diseases due to animal parasites and those due to vegetable parasites. As an example of the former scabies has been frequently mentioned in the past few years and in the latter class ringworm is rapidly attaining the position of a commonplace while a decade ago it was comparatively rare in California.

The occurrence of quite a series of cases called by most California observers granuloma coccidioides, and originating in one circumscribed district, has presented a problem in mycology of especial interest to the practitioners of this state. The increasing number of diseases due to fungi reported in foreign countries as well as in other parts of this country leads not unnaturally to the supposition that unrecognized forms of mycotic disease exist here.

The importance of the subject to the general practitioner or the specialist in any department is shown by the following facts:

Coccidioidal granuloma may involve any organ of the body. Aspergilloses and mucormycosis may simulate pulmonary tuberculosis. Generalized mucormycosis of Paltauf resembles typhoid fever. Blastomycetic dermatitis may be taken for tuberculosis or epithelioma. Sporotrichosis is easily confused with tuberculosis, syphilis, pyogenic infection or glanders.

So many diseases due to fungi present subcutaneous nodules as their most usual lesion that the methodical investigation by direct microscopic examination and cultures should be undertaken in any doubtful case.

In order to discuss clearly such a comprehensive title as parasitic skin diseases in California let us arrange the parasitic diseases by groups. They are naturally separated first of all into two divisions—animal and vegetable.

It is important that the role of the animal parasite be recognized in the production of cutaneous lesions. The typical scabies eruption is, of course, characteristic but the urticarial reaction or the autographism which usually is manifest in subjects of scabies sometimes leads to error in diagnosis. The same reaction is seen in many individuals, especially children, who have been bitten by fleas, bedbugs, etc. In this case, though the diagnosis be urticaria or lichen urticatus, we must consider it merely as the reaction of the sensitized subject to the bite of the insect. A disease which looks like urticaria and acts like scabies was described by Schamberg as due to a mite found in the straw from certain fields not far from Philadelphia.

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